

CLAIM AMENDMENTS:

Claims 1-8 (Cancelled)

9. (Previously presented) A process for producing a particulate calcium carbonate which is suitable as a paper filler by taking advantage of a causticization step of a sulfate process or soda process, comprising:

producing a milk or slurry of lime by a first slaking reaction step of

(a) adding a white liquor to a quick lime containing 0.1 to 10% by weight of calcium carbonate on the basis of the weight of said quick lime to produce a quick lime mixture until a concentration of said quick lime reaches 0.5 to 60% by weight on the basis of the weight of said quick lime mixture before slaking; and

slaking said quick lime of step (a) with stirring or kneading to prepare said milk or slurry of lime, wherein the quick lime to be added to the first step (a) is obtained from a source that is not from a causticization step of a sulfate process or soda process;

a second causticizing reaction step of sequentially adding green liquor to said milk or slurry of lime, where said green liquor is obtained from a causticization step of a sulfate process or soda process and is added in an amount necessary to produce a white liquor and said particulate calcium carbonate having a spindle shape or rice shape, wherein said green liquor is added at a loading rate of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) and at a reaction temperature of 20 to 105 °C, and then

separating said particulate calcium carbonate from said white liquor.

10. (Previously presented) The process of claim 9, comprising continuously adding said green liquor to said milk or slurry of lime in said causticizing reaction step to causticize said slaked lime.

11. (Previously presented) The process of claim 9, wherein said quick lime to be added to the first step (a) is produced from limestone.

12. (Currently amended) ~~The process of claim 9,~~ A process for producing a particulate calcium carbonate which is suitable as a paper filler by taking advantage of a causticization step of a sulfate process or soda process, comprising:

producing a milk or slurry of lime by a first slaking reaction step of

(a) adding a white liquor to a quick lime containing 0.1 to 10% by weight of calcium carbonate on the basis of the weight of said quick lime to produce a quick lime mixture until a concentration of said quick lime reaches 0.5 to 60% by weight on the basis of the weight of said quick lime mixture before slaking; and

slaking said quick lime of step (a) with stirring or kneading to prepare said milk or slurry of lime, wherein said quick lime to be added to the first step (a) is a mixture of (i) a quick lime produced from limestone and (ii) a calcination product of a limestone obtained from a causticization step of a sulfate process or soda process;

a second causticizing reaction step of sequentially adding green liquor to said milk or slurry of lime, where said green liquor is obtained from a causticization step of a sulfate process or soda process and is added in an amount necessary to produce a white liquor and said particulate calcium carbonate having a spindle shape or rice shape, wherein said green liquor is added at a loading rate of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) and at a reaction temperature of 20 to 105 °C, and then

separating said particulate calcium carbonate from said white liquor.

13. (Previously presented) A process for producing a particulate calcium carbonate which is suitable as a paper filler by taking advantage of a causticization step of a sulfate process or soda process, comprising:

producing a milk or slurry of lime by a first slaking reaction step of

(a) adding a white liquor to a quick lime containing 0.1 to 10% by weight of calcium carbonate on the basis of the weight of said quick lime to produce a quick lime mixture until a concentration of said quick lime reaches 0.5 to 60% by weight on the basis of the weight of said quick lime mixture before slaking; and

slaking said quick lime of step (a) with stirring or kneading to prepare said milk or slurry of lime, wherein the quick lime to be added to the first step (a) is obtained from a source that is not from a causticization step of a sulfate process or soda process;

a second causticizing reaction step of sequentially adding green liquor to said milk or slurry of lime, where said green liquor is obtained from a causticization step of a sulfate process or soda process and is added in an amount necessary to produce a white liquor and said particulate calcium carbonate having a spindle shape or rice shape, wherein said green liquor is added at a loading rate of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) and at a reaction temperature of 20 to 105 °C, and then

separating said particulate calcium carbonate from said white liquor, wherein said particulate calcium carbonate has a width of about 0.3 μm to 1.5 μm and a length of about 0.5 to 7 μm .

14. (Previously presented) The process of claim 13, wherein said quick lime to be added to the first step (a) is produced from limestone.

15. (Currently amended) ~~The process of claim 13,~~ A process for producing a particulate calcium carbonate which is suitable as a paper filler by taking advantage of a causticization step of a sulfate process or soda process, comprising:

producing a milk or slurry of lime by a first slaking reaction step of

(a) adding a white liquor to a quick lime containing 0.1 to 10% by weight of calcium carbonate on the basis of the weight of said quick lime to produce a quick lime mixture until a concentration of said quick lime reaches 0.5 to 60% by weight on the basis of the weight of said quick lime mixture before slaking; and

slaking said quick lime of step (a) with stirring or kneading to prepare said milk or slurry of lime, wherein said quick lime to be added to the first step (a) is a mixture of (i) a quick lime produced from limestone and (ii) a calcination product of a limestone obtained from a causticization step of a sulfate process or soda process;

a second causticizing reaction step of sequentially adding green liquor to said milk or slurry of lime, where said green liquor is obtained from a causticization step of a sulfate process or soda process and is added in an amount necessary to produce a white liquor and said particulate calcium carbonate having a spindle shape or rice shape, wherein said green liquor is added at a loading rate of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) and at a reaction temperature of 20 to 105 °C, and then

separating said particulate calcium carbonate from said white liquor, wherein said particulate calcium carbonate has a width of about 0.3 μ m to 1.5 μ m and a length of about 0.5 to 7 μ m.

16. (Previously presented) The process of claim 13, comprising continuously adding said green liquor to said milk or slurry of lime to causticize said slaked lime.

17. (Previously presented) A process for preparing calcium carbonate particles having a particulate shape suitable as a paper filler, said process comprising the steps of:

adding a white liquor to a quick lime containing 0.1 to 10% by weight calcium carbonate to obtain a quick lime mixture having a quick lime concentration of 0.5 to 60% by weight, said quick lime is obtained from a source that is not from a causticization step of a sulfate pulping process or soda pulping process; and

slaking said quick lime mixture with stirring or kneading to produce a milk or slurry of lime;

causticizing said milk or slurry of lime by the addition of a green liquor obtained from a causticization step of a sulfate pulping process or soda pulping process, said green liquor being added in an amount to produce a white liquor and a particulate calcium carbonate having a spindle shape or a rice shape at a loading of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) at a reaction temperature of 20 °C to 105 °C, and

separating said particulate calcium carbonate from said white liquor.

18. (Previously presented) The process of claim 17, wherein said quick lime to be added to the first step (a) is produced from limestone.

19. (Currently amended) ~~The process of claim 17,~~ A process for preparing calcium carbonate particles having a particulate shape suitable as a paper filler, said process comprising the steps of:

adding a white liquor to a quick lime containing 0.1 to 10% by weight calcium carbonate to obtain a quick lime mixture having a quick lime concentration of 0.5 to 60% by weight, wherein said quick lime to be added to the first step [(a)] is a mixture of (i) a quick

lime produced from limestone and (ii) a calcination product of a limestone obtained from a causticization step of a sulfate process or soda process;

slaking said quick lime mixture with stirring or kneading to produce a milk or slurry of lime;

causticizing said milk or slurry of lime by the addition of a green liquor obtained from a causticization step of a sulfate pulping process or soda pulping process, said green liquor being added in an amount to produce a white liquor and a particulate calcium carbonate having a spindle shape or a rice shape at a loading of 0.02 to 0.5 cc (green liquor)/min/g (quick lime) at a reaction temperature of 20 °C to 105 °C, and

separating said particulate calcium carbonate from said white liquor.

20. (Previously presented) The process of claim 17, wherein said separated particulate calcium carbonate has a particle size with a width of about 0.3 μm to 1.5 μm and a length of about 0.5 to 7 μm .

21. (Previously presented) The process of claim 17, wherein said white liquor contains 80 to 160 g/l of Na_2O .

22. (Previously presented) The process of claim 21, wherein said white liquor contains 30 g/l or less of Na_2CO_3 .

23. (Previously presented) The process of claim 17, comprising continuously adding said green liquor to said milk or slurry of lime in said causticizing step to causticize said slaked lime.